

A History of Land Use of the San Andres National Wildlife Refuge, New Mexico

INTRODUCTION

The San Andres National Wildlife Refuge was established by Presidential order in 1941. The principal reason for the creation of this refuge was to attempt to manage or "bring back" the remnant herd of Mexican bighorn (*O. c. mexicana*) on the area. As far as known this herd numbered about 25 at the time of the order. But two other herds of native bighorn remain in New Mexico: one of these is in the Guadalupe Mountains in the southeastern part of the state and one is in the Big Hatched Mountains in southwestern New Mexico. These two herds have not as yet been put under as intensive management as the San Andres herd. As a result, the work on the San Andres is important from the standpoint of attempting to save the native sheep of New Mexico from extinction. With this in mind it was deemed advisable to utilize as many management techniques as possible to achieve our goal. As land use history is generally recognized as a game management tool, the present paper can be considered a part of the bighorn management program of the San Andres Refuge.

LOCATION

The San Andres Refuge is located in the San Andres Mountains of south-central New Mexico in Dona Ana County. The San Andres Range, which is 75 miles long, is one of several north-south, semi-desert ranges in this part of New Mexico. The refuge is confined to 21-1/2 miles of the southern part of the length of this narrow uplift. The range separates the Tularosa Basin, which contains the White Sands area, from the plain of the Jornada del Muerto, which is bounded on the west by the Rio Grande.

GEOLOGY

Darton (1928), Little and Campbell (1943), and others have well described this area. The following is briefed from their work. The range presents to the west a long slope of upper Paleozoic (Pennsylvanian) limestone with some sandstone and shale that were uplifted at the close of the Tertiary. On the east the range rises precipitously from the Tularosa Basin exhibiting a slope of granite and schist surmounted by cliffs of limestone and is structurally a westward dipping monocline. The plain of the Jornada del Muerto to the west of the range is an erosion surface formed by lateral planation and has no permanent water except man-created wells and tanks.

LIFE ZONES AND CLIMATE

Bailey (1913) in his frontispiece map clearly shows the zonation of the San Andres Mountains. Both the Tularosa Basin and the Jornada plain are in Lower Sonoran; the foothills and all of the San Andres Range within the refuge lie within the Upper Sonoran Zone. This zone is locally characterized by small areas of pinon (*P. edulis*) and juniper (*J. monosperma*) on north-facing slopes. San Andres Peak, which rises to a height of approximately 8000 feet and is the highest point of the refuge, supports a few rock plant species of the Transition Zone, which is characterized just south of the San Andres Mountains by limited areas of ponderosa pine in the higher reaches of the Organ Mountains. The Transition Zone is also represented north of the refuge in the Salinas Peak area of the northern part of the San Andres Range.

The climate is semiarid and characterized by long hot summers and mild winters. The rainfall on the Lower Sonoran plain at 4150 feet elevation averages 9.33 inches annually, but at Ropes Springs in the western foothills of the San Andres the rainfall averages 12.70 inches. About half of this precipitation falls during the months of July, August, and September as a result of intense local thunderstorms. The evaporation from an open pan is great because of the low humidity, being approximately ten times the annual rainfall. The prevailing winds are southwesterly, and the growing season in the nearby Mesilla Valley of the Rio Grande averages 208 days (Hardy, 1941).

EARLY SPANISH USE

Coronado passed through New Mexico in 1540. Since that time the Spanish-speaking peoples have dominated the valley of the Rio Grande with the exception of the time of the Pueblo uprising of the 17th century. Persistent legend (Trumbo, 1944) tells of early Spanish gold mines at the southern end of the San Andres Mountains near the present town of Organ. This suggests the early utilization of the fine grama grasses (*Bouteloua* sp.) by horses, burros, and domestic goats. By the middle of the 19th century, however, the Spanish speaking peoples, who were by then a true melting pot of various native and European races, were well established in the valley of the Rio Grande. Lack of developed water and the presence of the Mescalero Apache Indians (Castetter & Opler, 1936) were a detriment to grazing of livestock as we know it today in the San Andres.

During the middle of the 19th century and perhaps earlier, Mexicans from Chihuahua, south of the Rio Grande, secured salt from the salt flats on the eastern side of the San Andres Mountains north of the present refuge boundary. In the spring a party would be sent to this isolated locality to dry out the salt blocks. In the fall a caravan of heavy wooden-wheeled, ox-drawn vehicles would arrive, load the salt, and return

to Chihuahua City. Mr. Watson E. Rich, old-time San Andres resident, in conversation July 21, 1944 told me of seeing old tracks in the mud flats between the base of the San Andres and the White Sands. He described these in detail, telling how the tracks had evidently been made while the mud was damp and that later they had been filled in by a different color mud. The wavy line of the tracks indicated that the wooden wheels were worn on their axles. Mr. Rich has found several of these old wagon parts. Some of these are now in the Museum of the White Sands National Monument, and two wheel parts are stored in Mr. Rich's garage where we noted them. They are huge and massive and made of cottonwood (*Populus sp.*). The refuge is now on land through which this ancient trail was followed. As Mr. Rich pointed out, the trail was not too close to the mountains so that the caravan men could plainly discern the approach of the Apaches, who are said to have raided these trains from the deep canyons of the San Andres. In this connection, although it is far from known fact, the Spanish-speaking Americans of the Tularosa Basin today tell of the existence of a church bell in a cave or under a ledge on Goat or Bennett Mountain (now within the refuge) that was hid from a party of raiding Apaches and never became a part of one of the missions to the north. From this outline of ancient use we can surmise that the grass and herbage around the regular camping grounds on the old Chihuahua Salt Trail were well utilized by horses and oxen.

During the 1850's and 1860's there were numerous clashes between the local militia and the Indians. The local old families can be traced back to this period. A Caniffe (family of the mother of Genevieve Lucero Senders) was a member of a volunteer company of the U. S. Army in 1847. During the 1860's (Webb, 1939) the United States Army had several skirmishes with the Apaches in the San Andres Mountains. The camps of these peoples can still be found on the refuge; on the plains surrounding the refuge, ethnologists have found indications of earlier cultures. It can be safely assumed that during the later period of Apache use horses of the Indians, many times stolen from the peoples of the plains, were grazed in the San Andres. The main home of the Apaches appeared to be the Sacramento Mountains, and some of the early local cattlemen assert that annual trips were made to the Organ and San Andres mountains from the Sacramentos for the purpose of hunting.

EARLY CATTLE RANCHES AND THEIR HISTORY

The land use pattern is so involved during the period of the 1880's to the present that it is confusing to one not familiar with the area to follow a straight narrative of the times. Therefore, a map in connection with this report indicates the principal waters and a few other features. In addition we have blocked off and named the various ranches on and adjacent to the area as they are known at this time. Thus, if we refer to

an area, for example that included what is now the "Little Joe" Lucero place, reference to the map will quickly locate the area in question.

The steep and rough San Andres Mountains acted as a barrier or natural fence between the Jornada del Muerto and the Tularosa Basin. Thus the present area of the refuge included the back reaches only of many of the ranches in question. The ranchers on the eastern side of the range, to a large extent, used the town of Alamogordo as their supply base; while the ranchers of the western side used the town of Las Cruces on the Rio Grande as their base. The natural pass between these two areas has always been San Augustine Pass, a mile high pass between the southern end of the San Andres Mountains and the northern end of the Organ Mountains. The south end of the San Andres Refuge is Bear Canyon, approximately 8 miles north of San Augustine Pass, which is also the location for the town of Organ.

In the early 1880's the Wildy outfit operating from what is now the Jim Cox ranch (son of W. W. Cox) in the northeastern part of the Organ Mountains ran cattle for at least 30 miles up the San Andres Range. This outfit had secured their black cattle from old Luis Terrazas. The cattle were wild and used "to graze all the way to the top of the San Andres, and they didn't see people often." (O'Neil, 1935, p. 197). The Bairds, who now run cattle on the eastern side of the refuge from the north end south to San Andres Canyon, in 1897 bought out Joe Hendrickson, who had also run cattle in this area. Hendrickson had bought the property from Davee. Davee is the man who built the large rock house at "Fresno" (junction of Ash and Salt Canyons).

In 1897, Felipe Lucero started his ranch at Big St. Nicholas 5 miles east of the present refuge boundary. Felipe secured the ranch from W. W. Cox who bought it for him from Dave Wood. Mr. Wood had secured the ranch from his father-in-law, Mr. Ackenbach, who built the stone house, now in ruins, at Big St. Nicholas. These men ran cattle and horses to the base of the range. "Nick" Apodoca, a cowpuncher who now works intermittently in this area, punched cows at Little St. Nicholas for his relatives. He married Dave Wood's sister.

The land adjoining the base of Bennett Mountain at the southeast corner of the refuge has been held by so many parties that it is confusing (now held by C. V. & Leon Stewart). These parties, starting about the 1890's include Henry Tulluck, Dave Wood, Mr. Walton (mouth of Bear Canyon), Mr. Candler (about 1913), Mr. Letterman, Jack Orman (now Hal Cox's foreman), Mr. Walker (now runs Border Truck Line), the W. W. Cox family, Yeerwood (bought in 1937 for about \$16,000), R. L. Thompson (bought it in 1941 for about \$24,000), G. B. Stewart (bought in 1942 for a reported \$9000 down and \$3000 per yr. for 15 yrs., \$27,000 of this for ranch & rest for cattle).

Felipe Lucero built the house at Little St. Nicholas. About 1906 Joe Taylor built the "Joe Taylor Cabin" which stands in St. Nicholas Canyon at the Jornada Experimental Range fence. These men ran cattle and horses.

The use of Goat and Bennett Mountains in the southeastern part of the area where the sheep are most numerous at present is also rather obscure. At the turn of the present century, Oscar Lohman ran goats on Bennett Mountain with D. Peacock. Oscar married a Caniffe girl, sister to Felipe Lucero's second wife. Sometime previous to 1927 a very small Spanish-American whose last name was Lucero (said not to be related to Felipe Lucero) ran goats on Goat and Bennett Mountains. He carried an old .44 rifle and a .44 revolver and is said to have killed bighorn on sight for no reason at all. (The barrel of this rifle can be seen at the old Goat Camp between Goat and Bennett Mountains.) He left when Jesse Isaacks bought the Spade ranch from D. M. Walton in 1927. Jesse Isaacks ran a few cattle and horses on the top of Goat Mountain when water was present in the two small earthen tanks just below "Goat Camp." Since Mr. R. L. Gray secured this ranch in 1943, no domestic stock have been run on the tops of Goat or Bennett Mountains.

O'Neil (1935) notes that a former college athlete from the east, named Edelson, ran goats for a short time in Ash Canyon in the "eighties." He states further that as predators and other items made the venture unprofitable, Edelson left.

In addition to these stockmen, a few miners are included in my notes. In the early 1900's a lead mine and mill was constructed at what is now known as Lead Camp (San Andres Canyon). Mexicans from Las Cruces were hired to cut cedar wood (Juniperus monosperma) in San Andracito Canyon and haul it to the mill. The old wagon road, now just a horse trail, can still be traced.

Two rather colorful characters lived in San Andracito Canyon for many years. One of these, Mr. Green Crawford (Halloran, 1943, M.S.) was known to have secured at least one bighorn in the San Andres. Crawford mined for many years in this area with Bob Mayberry. These men packed their food and supplies in on burros, which were grazed close to their camp in the canyon. Mr. Crawford is said to have died in 1925 in Kentucky, to which place he had returned a few years earlier to claim an inheritance. His true name was said to be Crawford Green. Bob Mayberry ran about 100-150 sheep from San Andracito Canyon north to Deadman Canyon between 1918 and 1920. In 1920 he decided to get rid of them and drove the remnant of his herd through the Goldenberg ranch (see map) to Las Cruces. At that time he offered to sell the 100 head to C. A. Beasley.

The western side of the refuge is now part of the Mountain Pasture (Pasture No. 11) of the Jornada Experimental Range. In the early 80's the Goldenberg Bros. ran cattle in the area now known as Goldenberg Springs (see map). North and east of this ranch, the Bairds ran horses in the San Andracito area for many years. The last of these horses have only recently been eliminated and over 100 still run on the east side of the refuge. In 1887 Horace Ropes came to what is now Ropes Springs and ran cattle under

the Fleur de Lis brand. This brand was commonly called "Flower de Luce" by the local cattlemen. The Goldenbergs later bought out Ropes, who returned to the East. During droughty times in the nineties, the Isaacks from the Organ Range put their cattle into Ash and Salt Canyon. The upper reaches of St. Nicholas Canyon were used during the nineties intermittently through the drought of the thirties by the Luceros for cattle and horses. The latter part of this period their stock was in trespass on the Experimental Range. In the southwestern corner of the refuge above Burke Springs, Mr. Jeff Ake, who died in 1934 at the age of 90, ran steeldust horses in the early nineties.

In the late eighties or early nineties a man by the name of Waldren ran cattle in the Bear Canyon area. He was bought out by Walton, who sold to Jesse Isaacks in 1927, as noted above.

In 1934 part of the area now covered by the refuge was taken over by the Grazing Service as Grazing District No. 4. The Grazing Service has no records of the use on the refuge as distinguished from the lower reaches of the ranches in question. The following tabulation by this office gives the present (1944) approximate use of the various refuge areas on the respective ranches, exclusive of the Forest Service use.

1. R. L. Gray - No use, except a very few cattle (under 30 head) in Bear Canyon.
2. C. V. & Leon Stewart - No use (refuge line is too high for cattle).
3. Price Sanders (now leased to Walter Burris). About 50 head in St. Nicholas-Cottonwood spring area.
4. Jose (Little Joe) Lucero.
 - a. Under 25 head (mostly horses) in pasture at Fresno (junction of Ash & Salt Canyons).
 - b. Under 75 head of cattle between Fresno & San Andres Canyon.
5. Walter Baird (Baird Estate)
 - a. Lease in San Andres Canyon (from Sanders, now said not to be in effect) 50 head of cattle.
 - b. Area from San Andres Canyon through San Andracito Canyon, under 50 head.
 - c. Under 25 horses in Baird horse pasture between San Andracito and Deadman Canyons.

6. 125 wild horses (from original Walter Baird stock to a large extent) from north fence of Lucero pasture at Fresno to south fence of Walter Baird horse pasture, one mile north of San Andracito Canyon.

Mr. Jack Bruton now runs cattle and horses at the northwest corner of the refuge and Frank Andregg now runs goats in the Deadman Canyon area just north of the refuge.

HISTORY OF THE JORNADA EXPERIMENTAL RANGE

The Jornada Range Reserve was created by Executive Order No. 1526, May 3, 1912 at the request of the Department of Agriculture. From May 3, 1912 to May 1, 1915, the unit was under the jurisdiction of the Bureau of Plant Industry. Since May 1, 1915 the unit has been under the jurisdiction of the Forest Service. Under Executive Order 2368, April 24, 1916 the boundaries were slightly modified, after which the unit contained 202,000 acres. Under Executive Order No. 4266, July 10, 1925, which included boundary modifications and land exchanges, the resultant area equalled 193,394 acres. In 1931 an order establishing the Jornada Experimental Range was issued in accordance with the instructions under Regulation L-20 of the National Forest Manual as amended by the Secretary of Agriculture August 7, 1930.

Mr. Tourney ran cattle and horses on the area until he sold out in 1926 when Mr. W. H. Waggoner took over. In 1934 Mr. B. A. Christmas, formerly of Lovington, New Mexico, secured the grazing privileges. There was a short break in Mr. Christmas' use of the range, but he is now firmly established as the permittee with, we understand, a recently agreed upon 17-year contract.

The San Andres Refuge occupies, in part, the upper reaches of Pasture 11 of the Jornada Experimental Range. Pasture 11 is that mountainous part of the area extending the north and south length of the range and from the foothills of the San Andres Mountains east to the eastern boundary of the Jornada Range near the crest of the range. The total area of Pasture 11 inside legal boundaries is 46,016.91 acres, but 5,360.83 of these acres are outside the pasture fence or other barriers. Of this range, it has been calculated (Bomberger, 1935) that but 33,589.99 acres are available to cattle and horses. The refuge, as an overlay, covers approximately 24,000 acres of Pasture 11. Since the refuge was established in 1941, and for a few years before, Mr. Christmas allowed Mr. J. C. Cox, formerly of Texas, to run the cattle in Pasture 11.

Forest Service figures are available in the refuge files telling of the use of Pasture 11. In the period 1916-1942, inclusive, an average of 218.2 animal units yearlong has been run in this area. This includes an average total number of horses yearlong of 110.0. In 1931 the majority of the wild

horses in Pasture 11 (largely in San Andrés Canyon) were eliminated. Even today a few wild horses drift (or are driven) into the northern part of Pasture 11 and are shot or otherwise utilized.

WHITE SANDS NATIONAL MONUMENT

The refuge has a section corner (NE Cor. Sec. 1, T19S, R4E, N.M.P.M.) common to the eastern boundary of the White Sands National Monument, which is under the jurisdiction of the National Park Service. This area, which allows some grazing in the vicinity of its eastern boundary, was created by Presidential Proclamation January 18, 1933 and was dedicated April 29, 1934.

ESTABLISHMENT OF THE SAN ANDRÉS NATIONAL WILDLIFE REFUGE

The San Andrés National Wildlife Refuge was established by Executive Order No. 8646, January 22, 1941. The area comprises approximately 57,215.48 acres of public land. It is an overlay refuge on both the New Mexico Tularosa Grazing District No. 4 of the Grazing Service, Department of the Interior and the Jornada Experimental Range of the Southwestern Forest and Range Experiment Station, U. S. Forest Service, Department of Agriculture. Agreements with both of these agencies provide in general for the game management to be administered by the Fish and Wildlife Service and the grazing by the cooperating agencies.

Since 1926 that part of the area common to the Jornada Experimental Range had been a state game refuge under the jurisdiction of the New Mexico Department of Game and Fish. Shortly after this (Ligon, 1927. p. 173) part of the area now covered by the refuge on the eastern slopes of the San Andrés Mountains was made a state refuge. This state refuge was abolished in 1941 by the State Game Commission "as most of the area was included in the larger newly established Federal refuge" (New Mexico Magazine, vol. 19, no. 9, p. 30).

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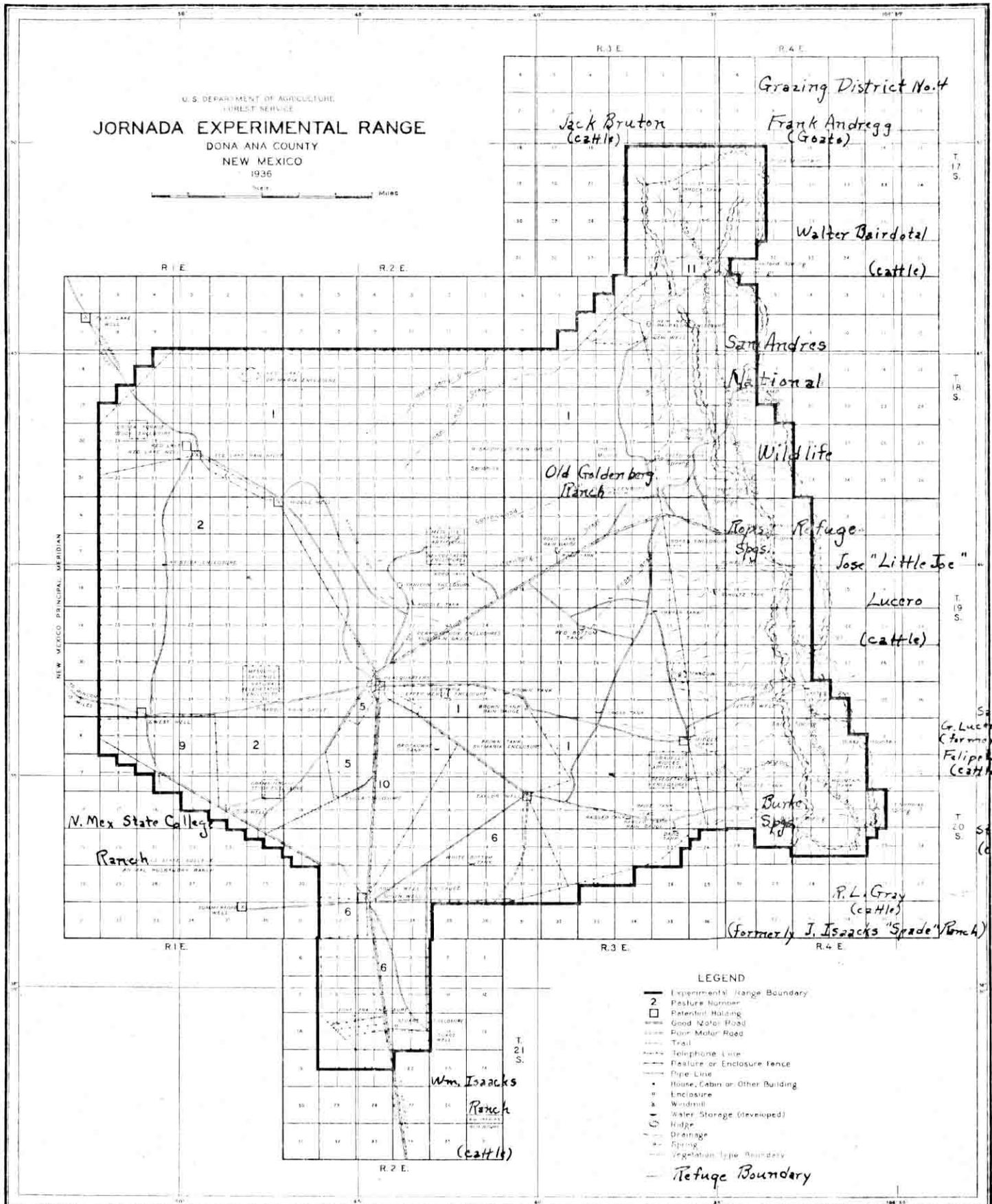
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Land Use on and adjacent to the San Andres National Wildlife Refuge
 (map with, "A History of Land Use of the San Andres Nat'l Wild : Refuge, New Mexico")



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